

ABSTRACT

A substrate with a plurality of concave portions according to the invention includes a substrate having a plurality of concave portions. The concave portions are formed on the substrate by means of an etching process so that the plurality of concave portions are randomly arranged on the substrate. First, a non-polymerized resin is applied to the face on which the concave portions of the substrate with concave portions for microlenses are formed. By polymerizing and hardening (solidifying) this resin and further removing the substrate with concave portions for microlenses from a resin layer, the resin layer is formed on the substrate. Thus, microlenses that are constituted from the resin filled in the concave portions and function as convex lenses are formed in the resin layer.